Notice of Allowability	Application No.	Applicant(s)	Applicant(s)	
	10/034,523	34,523 KAUFMAN ET AL.		
	Examiner	Art Unit	·	
	Kyle R. Stork	2178		
The MAILING DATE of this communication ap All claims being allowable, PROSECUTION ON THE MERITS herewith (or previously mailed), a Notice of Allowance (PTOL-8 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT of the Office or upon petition by the applicant. See 37 CFR 1.3	IS (OR REMAINS) CLOSED in 85) or other appropriate communication is s	n this application. If not included unication will be mailed in due co	urse. THIS	
1. 🔀 This communication is responsive to Appeal Brief filed 2	2 <u>3 May 2006</u> .			
2. The allowed claim(s) is/are 1,10,17 and 18.				
3. Acknowledgment is made of a claim for foreign priority  a) All b) Some* c) None of the:  1. Certified copies of the priority documents had 2. Certified copies of the priority documents had 3. Copies of the certified copies of the priority International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DATE noted below. Failure to timely comply will result in ABANDOI THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  4. A SUBSTITUTE OATH OR DECLARATION must be sull INFORMAL PATENT APPLICATION (PTO-152) which gets the priority documents had a substitute to the priority	ave been received.  ave been received in Application documents have been received  E" of this communication to file NMENT of this application.	In No If in this national stage application If a reply complying with the requi	rements	
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") m  (a) ☐ including changes required by the Notice of Draftsp  1) ☐ hereto or 2) ☐ to Paper No./Mail Date  (b) ☐ including changes required by the attached Examin Paper No./Mail Date  Identifying indicia such as the application number (see 37 CFF	erson's Patent Drawing Review  er's Amendment / Comment or	in the Office action of	ack) of	
each sheet. Replacement sheet(s) should be labeled as such i  6. DEPOSIT OF and/or INFORMATION about the de attached Examiner's comment regarding REQUIREMEN	in the header according to 37 CF posit of BIOLOGICAL MATE	R 1.121(d). ERIAL must be submitted. Not	·	
Attachment(s)  1. Notice of References Cited (PTO-892)  2. Notice of Draftperson's Patent Drawing Review (PTO-948)  3. Information Disclosure Statements (PTO-1449 or PTO/SI	8) 6. ⊠ Interview St Paper No./	formal Patent Application (PTO-1 ummary (PTO-413), Mail Date <u>8.6.06</u> . Amendment/Comment	152)	
Paper No./Mail Date  4.	it 8. 🗌 Examiner's	Statement of Reasons for Allowa	ance	

## **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Marc McSwain (Reg. No. 44,929) on 8 June 2006.

The application has been amended as follows:

1. (Currently Amended) A computer-implemented method for generating a table of contents for a document using information in said document, comprising:

building a model of said document including an initial semantic structure;

detecting hierarchical changes in said semantic structure spanning different

scales by

applying successively smaller scale filter windows to said model according

to said initial semantic structure to construct a map of said

changes versus scale;

identifying local peaks in said contour map, said peaks being points of

maximum vector derivative magnitude;

tracing said local peaks back to a semantic structure change origin point;

measuring a span of scales over which each said change exists; and

ordering said changes into entries in said table of contents based on scale span.

10. (Previously Presented) The method of claim 1 wherein said building further comprises:

defining a vector of terms occurring in said document; and mapping said document into a vector space by projecting scaled term occurrence histogram data onto said vector of terms and summarizing said terms using singular-value decomposition.

- 15. (Canceled)
- 17. (Currently Amended) A system for generating a table of contents for a document using information in said document, comprising:
  - means for building a model of said document including an initial semantic structure;
  - means for detecting hierarchical changes in said semantic structure spanning different scales by
    - applying successively smaller scale filter windows to said model according

      to said initial semantic structure to construct a map of said

      changes versus scale;
    - identifying local peaks in said contour map, said peaks being points of

      maximum vector derivative magnitude;

tracing said local peaks back to a semantic structure change origin point;

measuring a span of scales over which each said change exists; and

means for ordering said changes into entries in said table of contents based on scale span.

- 18. (Currently Amended) A computer program product comprising a machine-readable medium tangibly embodying computer-executable program instructions thereon for generating a table of contents for a document using information in said document, including:
  - a first code means for building a model of said document including an initial semantic structure;
  - a second code means for detecting hierarchical changes in said semantic structure spanning different scales by
    - applying successively smaller scale filter windows to said model according

      to said initial semantic structure to construct a map of said

      changes versus scale;
    - identifying local peaks in said contour map, said peaks being points of maximum vector derivative magnitude;

tracing said local peaks back to a semantic structure change origin point;

measuring a span of scales over which each said change exists; and

a third code means for ordering said changes into entries in said table of

contents based on scale span.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyle R. Stork whose telephone number is (571) 272-4130. The examiner can normally be reached on Monday-Friday (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kyle R Stork Patent Examiner Art Unit 2178

STEPHEN HONG
SUPERVISORY PATENT EXAMINER

krs